



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/455,821 12/06/99 ARMSTRONG

B 27676-2/P08 *NP*

brad a. armstrong
PO BOX 1419
PARADISE CA 95967

MMC2/1012

EXAMINER

EASTHOM, K	
ART UNIT	PAPER NUMBER

2832

DATE MAILED:

10/12/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Notice of Allowability

Application No.
09/455,821

Applicant(s)
Armstrong

Examiner
Karl Easthom

Art Unit
2832



--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the election of 8/23/01 and amendment of 9/5/01.

2. ☒ The allowed claim(s) is/are 25-33.

3. ☐ The drawings filed on _____ are acceptable as formal drawings. FE 11/14/01

4. ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

5. ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE FOR SUBMITTING NEW FORMAL DRAWINGS, OR A SUBSTITUTE OATH OR DECLARATION. This three-month period for complying with the REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL is extendable under 37 CFR 1.136(a).**

6. ☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.

7. ☒ Applicant MUST submit NEW FORMAL DRAWINGS

(a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) ☐ hereto or 2) ☒ to Paper No. 4.

(b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the examiner.

(c) ☐ including changes required by the attached Examiner's Amendment/Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

8. ☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any reply to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

Attachment(s)

1 ☐ Notice of References Cited (PTO-892)

3 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

5 ☒ Information Disclosure Statement(s) (PTO-1449), Paper No(s). 20

7 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

9 ☐ Other

2 ☐ Notice of Informal Patent Application (PTO-152)

4 ☒ Interview Summary (PTO-413), Paper No. 21

6 ☒ Examiner's Amendment/Comment

8 ☒ Examiner's Statement of Reasons for Allowance

KARL D. EASTHOM
PRIMARY EXAMINER

Art Unit: 2832

JP
10/9/01

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Brad A. Armstrong on 9/18/01.

The application has been amended as follows:

In claim 31, line 6, ~~--snap--~~ was inserted before "threshold".

2. The following is an examiner's statement of reasons for allowance: The claimed method of employing an analog or variable output sensor with a snap tactile feedback is not disclosed or suggested by the prior art of record. Kambic (IBMTDB) discloses a digital sensor with snap feedback. While digital and analog sensors are disclosed in Mitchell, there is no suggestion to employ such a sensor with a snap type feedback. It is noted that the material 7 of Kambic could arguably be defined having an analog response because it does not have a pure on/off resistance versus pressure curve, no similar type materials do. However, it is employed as an on/off sensor device for digital encoding. For example, see Fig. 7 of Mitchell where the force versus resistance curve 29 is for all practical purposes digital, or on/off in response, and the material represented by curve 29 is not employed in an analog sensor, even though it could be employed in an analog sensor, strictly speaking, since the material does not respond with exact on/off behavior. (The line 29 is virtually vertical but not exactly vertical - see also curve 29). The

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claims are interpreted as covering methods that employ variable or analog sensors, as opposed to on/off or digital sensors.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl Easthom whose telephone number is (703) 308-3306. The examiner can normally be reached on M-Th from 6:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Gellner, can be reached on (703) 308-1721. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1721.



KARL D. EASTHOM
PRIMARY EXAMINER



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

NOTICE OF ALLOWANCE AND ISSUE FEE DUE

MMC2/1012

brad a. armstrong
PO BOX 1419
PARADISE CA 95967

APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
09/455,821	12/06/99	008	EASTHOM, K	2832 10/12/01
First Named Applicant	ARMSTRONG, 35 USC 154(b) term ext. = 0 Days.			

TITLE OF INVENTION VARIABLE-CONDUCTANCE SENSOR

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
3	27676-2/P08	338-114.000	N42	UTILITY	YES \$640.00	01/14/02

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.

HOW TO RESPOND TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
- B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give application number and batch number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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